

Method Of Fabricating High Voltage Transistor

ABSTRACT

A high voltage MOS transistor has a thermally-driven-in first doped region and a second doped region that form a double diffused drain structure. Boundaries of the first doped region are graded. A gate-side boundary of the first doped region extends laterally below part of the gate electrode. The second doped region is formed within the first doped region. A gate-side boundary of the second doped region is separated from a closest edge of the gate electrode by a first spaced distance. The gate-side boundary of the second doped region is separated from a closest edge of the spacer by a second spaced distance. The first spaced distance is greater than the second spaced distance. An isolation-side boundary of the second doped region may be separated from an adjacent isolation structure by a third spaced distance.